AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-29. (Canceled)

30. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

31. (New) The method of claim 30, wherein the circuit-switched service parameters define multi-level service information or bearer capability information.

32. (New) The method of claim 31, wherein the multi-level service information is selected from:

precedence information to assign a priority to a call; and

pre-emption information for a seizure of resources by a higher level precedence call in the absence of idle resources.

33. (New) The method according to claim 31, wherein the multi-level service information includes Multi-Level Precedence and Preemption (MLPP) precedence levels utilized in circuit-switched networks.

34. (New) The method according to claim 31, wherein the multi-level service information includes enhanced Multi-Level Precedence and Preemption (eMLPP) precedence levels utilized in GSM networks.

35. (New) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Type of Service field according to IPv4.

36. (New) The method according to claim 30, wherein the packet-switched service parameters define a requested level of service in the packet-switched network through bit settings in a service differentiation field (DS) of data packets, wherein the DS field is a Traffic Class Octet field according to IPv6.

37. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:

receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.

38. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein packets in a data stream with a corresponding higher level of precedence are provided with Multiple Protocol Label Switching (MLPS)

protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

39. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:

receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein packets in a data stream with a higher level of precedence are provided with Multiple Protocol Label Switching (MLPS) protocol labels utilized in packet headers to define a label-switched path for a data stream within the packet-switched network;

mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a corresponding level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

40. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said method comprising:

receiving at the interworking node, circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein a resource reservation protocol (RSVP) is utilized in the packet-switched network to reserve bandwidth for a high priority data stream mapped from a corresponding high precedence call in the circuit-switched network; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

41. (New) A service parameter interworking method in an interworking node, said method adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said method comprising:

receiving at the interworking node, packet-switched service parameters from the packet-switched network, said packet-switched service parameters being associated with a high priority data stream for which a resource reservation protocol (RSVP) is utilized to reserve bandwidth in the packet-switched network;

mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a corresponding higher level of precedence may preempt a call with a lower level of

precedence when there are insufficient network resources in the circuit-switched network for both calls; and

forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network utilizing a label-switched path when the corresponding precedence level in the circuit-switched network is high.

42. (New) An interworking node adapted to achieve a service parameter exchange between a circuit-switched network using a circuit-oriented protocol and a packet-switched network using a packet-oriented protocol, said interworking node comprising:

means for receiving circuit-switched service parameters from the circuit-switched network, wherein the circuit-switched service parameters define a level of precedence assigned to a call in the circuit-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls;

means for mapping the circuit-switched service parameters into corresponding packet-switched service parameters, wherein the packet-switched service parameters define a level of precedence utilized for a data stream within the packet-switched network corresponding to the level of precedence assigned to the call in the circuit-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network; and

means for forwarding payload data across a network boundary between the circuit-switched network and the packet-switched network using a mapping result;

wherein the payload data is transported in the packet-switched network with a precedence level corresponding to the mapped precedence level from the circuit-switched network.

43. (New) An interworking node adapted to achieve a service parameter exchange between a packet-switched network using a packet-oriented protocol and a circuit-switched network using a circuit-oriented protocol, said interworking node comprising:

means for receiving at the interworking node, packet-switched service parameters from the packet-switched network, wherein the packet-switched service parameters define a level of precedence assigned to a data stream within the packet-switched network, wherein packets in a data stream with a higher level of precedence may be protected from being dropped when there is congestion in the packet-switched network;

means for mapping the packet-switched service parameters into corresponding circuit-switched service parameters, wherein the circuit-switched service parameters define a level of precedence utilized for a call in the circuit-switched network corresponding to the level of precedence assigned to the data stream in the packet-switched network, wherein a call with a higher level of precedence may preempt a call with a lower level of precedence when there are insufficient network resources in the circuit-switched network for both calls; and

means for forwarding payload data across a network boundary between the packet-switched network and the circuit-switched network using a mapping result;

wherein the payload data is transported in the circuit-switched network with a precedence level corresponding to the mapped precedence level from the packet-switched network.